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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Paper No. 21

Application Number: 09/435,504
Filing Date: November 06, 1999
Appellant(s): FERNANDEZ, DENNIS SUNGA

Dennis S. Fernandez
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed June 19, 2003.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4) Status of Amendments After Final

The amendment after final rejection filed on 6/19/03 has been entered.

(5) Summary of Invention

The summary of invention contained in the brief is correct.

(6) Issues

The appellant's statement of the issues in the brief is correct.

(7) Grouping of Claims

Appellant's brief includes a statement that claims 1-12 and 21-28 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

6,366,682	Hoffman et al.	4-2002
6,275,824	O'Flaherty et al.	8-2001
5,876,926	Beechman	3-1999
6,389,428	Rigault et al.	5-2002

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 5, 7, 8, 11, 12, 21-25 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,366,682 to Hoffman et al. in view of U.S. Patent No. 6,275,824 to O'Flaherty et al.

As per claim 1, Hoffman et al. teaches a method and system for tokenless authorization of commercial transactions where a buyer registers with a computer system by submitting a PIN, at least one registration biometric sample (reads on "personal genetic nucleotide profile") and at least one financial account (see: column 4, lines 18-24). During the transmission step, when a buyer accepts a seller proposal (transaction), the computer system compares the bid biometric sample with the registered biometric samples for producing either a successful or failed identification of the buyer (reads on "automated transaction method via a processor used for evaluating a user transaction"). In another embodiment, Hoffman et al. teaches an increase to provide assurance of accurate identification by comparing a buyer's biometric from among a basket of other biometric, the basket being a subset of all stored biometrics in the system (reads on "user permitting a portion of a personal genetic profile being associated or used with evaluating the user transaction") (see: column 5, lines 60-64).

Hoffman et al. fails to teach a bioinformatic value automatically determined when or after the user permits access to a voluntarily-selected portion of his or her personal genetic nucleotide profile, such accessible portion being associated or used with evaluating the user transaction via a processor, an other portion of such genetic profile being not voluntarily-selected by the user and thereby inaccessible for evaluating the user transaction.

O'Flaherty et al. teaches system and method for managing data privacy in a database management system that allows the storing of one or more characters ("A" or "D") or flags (represented by "Is" and "Os") which specify privacy preferences for the consumer's data records. These privacy preferences include "opt-outs" for (1) direct marketing, (2) disclosure of personal data along with information identifying the consumer, (3) anonymous disclosure of personal data, (4) disclosure of personal data for purposes of making automated decisions, and (5) disclosure or use of sensitive data (see: column 7, lines 10-35). The customer table (202, Fig. 3A) also comprises a global data control column (210, Fig. 3A). If a consumer permitted some data collection, analysis, or dissemination by selecting a "0" in the global data control column (210, Fig. 3A). The customers has indicated that his information can be disclosed to a third parties, both with his identity, and anonymously and has allowed the data to be used to perform automated processing, and will permit the dissemination of sensitive data (see: column 7, lines 10-35 and Fig. 3A-3C) (reads on "other portion of profile information being not voluntarily selected by the user and thereby inaccessible for evaluating the user transaction").

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the privacy preference including "opts-outs" as taught by O'Flaherty et al. within the tokenless electronic transaction system using biometric samples as

taught by Hoffman et al. with the motivation of protecting the rights of individuals regarding data abuse by those in control of an individual's stored information (see: column 2, lines 41-47).

As per claim 5, O'Flaherty et al. teaches system and method for managing data privacy in a database management system that allows the storing of one or more characters ("A" or "D") or flags (represented by "Is" and "Os") which specify privacy preferences for the consumer's data records. These privacy preferences include "opt-outs" for (1) direct marketing, (2) disclosure of personal data along with information identifying the consumer, (3) anonymous disclosure of personal data, (4) disclosure of personal data for purposes of making automated decisions, and (5) disclosure or use of sensitive data (see: column 7, lines 10-35). The customer table (202, Fig. 3A) also comprises a global data control column (210, Fig. 3A). If a consumer permitted some data collection, analysis, or dissemination by selecting a "0" in the global data control column (210, Fig. 3A). The customers has indicated that his information can be disclosed to a third parties, both with his identity, and anonymously and also has allowed the data to be used to perform automated processing, and will permit the dissemination of sensitive data (see: column 7, lines 10-35 and Fig. 3A-3C) (reads on "user-authorized mask").

As per claim 7, Hoffman et al. and O'Flaherty et al. teach a method and system for tokenless authorization of commercial transactions where a buyer registers with a computer system by submitting a PIN, at least one registration biometric sample and at least one financial account (see: Hoffman: column 4, lines 18-24). Hoffman et al. and O'Flaherty et al. teaches system and method for managing data privacy in a database management system that allows the storing of one or more characters ("A" or "D") or flags (represented by "1 s" and "Os") which

specify privacy preferences for the consumer's data records (see: O'Flaherty et al: column 7, lines 10-35).

As per claim 8, Hoffman et al. and O'Flaherty et al. teach a method and system for tokenless authorization of commercial transactions where a buyer registers with a computer system by submitting a PIN, at least one registration biometric sample and at least one financial account (see: Hoffman: column 4, lines 18-24). During the transmission step, when a buyer accepts a seller proposal (transaction), the computer system compares the bid biometric sample with the registered biometric samples for producing either a successful or failed identification of the buyer (see: column 5, lines 60-64). In another embodiment, Hoffman et al. and O'Flaherty et al. teach an increase to provide assurance of accurate identification by comparing a buyer's biometric from among a basket of other biometric, the basket being a subset of all stored biometrics in the system (see: Hoffman: column 5, lines 60-64). Hoffman et al. and O'Flaherty et al. teach a system and method for managing data privacy in a database management system that allows the storing of one or more characters ("A" or "D") or flags (represented by "1 s" and "Os") which specify privacy preferences for the consumer's data records (see: O'Flaherty: column 7, lines 10-35).

As per claims 11 and 12, Hoffman et al. teaches a method and system for tokenless authorization of commercial transactions where a buyer registers with a computer system by submitting a PIN, at least one registration biometric sample and at least one financial account (see: column 4, lines 18-24). During the transmission step, when a buyer accepts a seller proposal (transaction), the computer system compares the bid biometric sample with the registered biometric samples for producing either a successful or failed identification of the

buyer (see: column 4, lines 33-39). In another embodiment, Hoffman et al. teaches an increase to provide assurance of accurate identification by comparing a buyer's biometric from among a basket of other biometric, the basket being a subset of all stored biometrics in the system (see: column 5, lines 60-64). Hoffman et al. further teaches that each Data Processing Center (DPC) is made up of a number of computers and databases connected over a LAN or network (13, Fig. 1) (see: Hoffman: column 18, lines 51-52 and Fig. 2). In addition, Hoffman et al. teaches a terminal (2, Fig. 3) and the biometric input device (12, Fig. 3), which has biometric scanner (13, Fig. 3) (see: Hoffman: column 9, lines 27-29).

As per claim 21, Hoffman et al. teaches that to increase assurance of accurate identification a buyer's biometric is compared from a basket of other biometric, the basket being a subset of all stored biometrics in the system (see: column 5, lines 60-64).

As per claim 22, Hoffman et al. teaches a method and system for tokenless authorization of commercial transactions where a buyer registers with a computer system by submitting a PIN, at least one registration biometric sample and at least one financial account (see: column 4, lines 18-24). During the transmission step, when a buyer accepts a seller proposal (transaction), the computer system compares the bid biometric sample with the registered biometric samples for producing either a successful or failed identification of the buyer (see: column 4, lines 33-39).

As per claim 23, Hoffman et al. teaches a method and system for tokenless authorization of commercial transactions where a buyer registers with a computer system by submitting a PIN, at least one registration biometric sample and at least one financial account (see: column 4, lines 18-24). During the transmission step, when a buyer accepts a seller proposal (transaction), the computer system compares the bid biometric sample with the registered biometric samples for

producing either a successful or failed identification of the buyer (see: column 4, lines 33-39). In addition, Hoffman teaches that in order to protect against fraud a buyer during the registration step selects a private code in addition to biometric, PIN, financial accounts and index codes (see column 5, lines 1-8).

As per claim 24, Hoffman et al. teaches a method and system for tokenless authorization of commercial transactions where a buyer registers with a computer system by submitting a PIN, at least one registration biometric sample and at least one financial account (see: column 4, lines 18-24). During the transmission step, when a buyer accepts a seller proposal (transaction), the computer system compares the bid biometric sample with the registered biometric samples for producing either a successful or failed identification of the buyer (see: column 4, lines 33-39). Hoffman et al. further teaches a buyer identification procedure including messages regarding status codes (OK, failed, silent alarm) (see: column 22, lines 50 to column 23, lines 20).

As per claim 25, Hoffman et al. teaches the use of terminals (2, Fig. 3) and the biometric input device (12, Fig. 3), which has biometric scanner (13, Fig. 3) (see: column 9, lines 27-29).

As per claim 27, Hoffman et al. teaches a method and system for tokenless authorization of commercial transactions where a buyer registers with a computer system by submitting a PIN, at least one registration biometric sample (reads on "personal genetic nucleotide profile") and at least one financial account (see: column 4, lines 18-24). During the transmission step, when a buyer accepts a seller proposal (transaction), the computer system compares the bid biometric sample with the registered biometric samples for producing either a successful or failed identification of the buyer (reads on "automated transaction method via a processor used for evaluating a user transaction"). In another embodiment, Hoffman et al. teaches an increase to

provide assurance of accurate identification by comparing a buyer's biometric from among a basket of other biometric, the basket being a subset of all stored biometrics in the system (reads on "user permitting a portion of a personal genetic profile being associated or used with evaluating the user transaction") (see: column 5, lines 60-64).

Hoffman et al. fails to teach a bioinformatic value automatically determined when or after the user permits access to a voluntarily-selected portion of his or her personal genetic nucleotide profile, such accessible portion being associated or used with evaluating the user transaction via a processor, an other portion of such genetic profile being not voluntarily-selected by the user and thereby inaccessible for evaluating the user transaction.

O'Flaherty et al. teaches system and method for managing data privacy in a database management system that allows the storing of one or more characters ("A" or "D") or flags (represented by "Is" and "Os") which specify privacy preferences for the consumer's data records. These privacy preferences include "opt-outs" for (1) direct marketing, (2) disclosure of personal data along with information identifying the consumer, (3) anonymous disclosure of personal data, (4) disclosure of personal data for purposes of making automated decisions, and (5) disclosure or use of sensitive data (see: column 7, lines 10-35). The customer table (202, Fig. 3A) also comprises a global data control column (210, Fig. 3A). If a consumer permitted some data collection, analysis, or dissemination by selecting a "0" in the global data control column (210, Fig. 3A). The customers has indicated that his information can be disclosed to a third parties, both with his identity, and anonymously and has allowed the data to be used to perform automated processing, and will permit the dissemination of sensitive data (see: column 7, lines

10-35 and Fig. 3A-3C) (reads on "other portion of profile information being not voluntarily selected by the user and thereby inaccessible for evaluating the user transaction").

The obviousness for combining the teaching of O'Flaherty in the system as taught by Hoffman et al. is discussed in the rejection of claim 1, and incorporated herein.

4. Claims 2-4, 6, 9, 10 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,366,682 to Hoffman et al. in view of U.S. Patent No. 6,275,824 to O'Flaherty et al. as applied to claim 1 above, and further in view of U.S. Patent No. 5,876,926 to Beecham.

As per claims 2-4, Hoffman et al. and O'Flaherty et al. fail to teach bioinformatic value comprising a likelihood or risk of the user having or developing a genetically-based mental or physiological or emotional condition, wherein the transaction step comprises providing the user with an insurance policy, service contract and promotional offer or bid to serve the genetically based condition.

Beecham teaches a method and apparatus for collecting sample from a test subject and taking the biometric data from the test subject (see: abstract). Beecham further teaches that genetic testing; for example, laboratory testing for genetic markers of disease and hereditary susceptibility to diseases or specific conditions is a rapidly developing area of medicine. Current methods include DNA and RNA analysis based on hybridization techniques such as fluorescence in situ hybridization, restriction length polymorphism and polymerase chain reaction for amplification of nucleic acid (see: column 5, lines 27-34). Furthermore, diseases and hereditary predispositions to disease for which genetic testing is currently available include sickle cell anemia, muscular dystrophy of various types, fragile X disease, chronic myelogenous leukemia,

predisposition to development of cancer such as breast cancer gene BRCA-1 or colon cancer gene. These issues have had considerable public attention focused on them because they may be used to discriminate against some people in specific settings, e.g., in the making of hiring and downsizing decisions, in permitting the individual to obtain health insurance and the likes (see: column 5, lines 35-44). Moreover, some people fear that if genetic test results were made available or seized from a doctor, discrimination may occur against individuals with genetic predisposition to disease. Governmental and private concern for implications of a positive genetic test result, as for example for BRCA1, is well known. For further example, President Clinton indicated recently that a law would be proposed that makes it illegal for an insurance company to restrict coverage where a person has a genetic test result indicating possible future disease is likely (see: column 18, lines 30-45).

One of ordinary skill in the art at the time the invention was made would have found it obvious to include the testing of biometric data for genetic markers of disease and hereditary susceptibility to diseases or specific conditions as taught by Beecham within the system as taught by Hoffman et al. and O'Flaherty et al. with the motivation of preventing discrimination against people in the workplace and obtaining health insurance (see: column 5, lines 40-45).

As per claim 6, Hoffman et al. and O'Flaherty et al. teach a system and method for managing data privacy in a database management system that allows the storing of one or more characters ("A" or "D") or flags (represented by "Is" and "Os") which specify privacy preferences for the consumer's data records. These privacy preferences include "opt-outs" for (1) direct marketing, (2) disclosure of personal data along with information identifying the consumer, (3) anonymous disclosure of personal data, (4) disclosure of personal data for

purposes of making automated decisions, and (5) disclosure or use of sensitive data (see: column 7, lines 10-35). The customer table (202, Fig. 3A) also comprises a global data control column (210, Fig. 3A). If a consumer permitted some data collection, analysis, or dissemination by selecting a "0" in the global data control column (210, Fig. 3A). The customers has indicated that his information can be disclosed to a third parties, both with his identity, and anonymously and also has allowed the data to be used to perform automated processing, and will permit the dissemination of sensitive data (see: O'Flaherty: column 7, lines 10-35 and Fig. 3A-3C).

Hoffman et al. and O'Flaherty et al. fails to teach bioinformatic value comprising a likelihood or risk of the user having or developing a genetically-based condition based on a statistical or actuarial table and a genetic or heredity profile associated with the user.

Beecham teaches a method and apparatus for collecting sample from a test subject and taking the biometric data from the test subject (see: abstract). Beecham further teaches that genetic testing; for example, laboratory testing for genetic markers of disease and hereditary susceptibility to diseases or specific conditions is a rapidly developing area of medicine. Current methods include DNA and RNA analysis based on hybridization techniques such as fluorescence in situ hybridization, restriction length polymorphism and polymerase chain reaction for amplification of nucleic acid (see: column 5, lines 27-34). Furthermore, diseases and hereditary predispositions to disease for which genetic testing is currently available include sickle cell anemia, muscular dystrophy of various types, fragile X disease, chronic myelogenous leukemia, predisposition to development of cancer such as breast cancer gene BRCA-1 or colon cancer gene. These issues have had considerable public attention focused on them because they may be used to discriminate against some people in specific settings, e.g., in the making of hiring and

downsizing decisions, in permitting the individual to obtain health insurance and the likes (see: column 5, lines 35-44). Moreover, some people fear that if genetic test results were made available or seized from a doctor, discrimination may occur against individuals with genetic predisposition to disease. Governmental and private concern for implications of a positive genetic test result, as for example for BRCA1, is well known. For further example, President Clinton indicated recently that a law would be proposed that makes it illegal for an insurance company to restrict coverage where a person has a genetic test result indicating possible future disease is likely (see: column 18, lines 30-45).

The obviousness for combining the teaching of Beecham with the system as taught by Hoffman et al. and O'Flaherty et al. are discussed in the rejection of claim 2, and incorporated herein.

As per claim 9, Hoffman et al. and O'Flaherty et al. fail to teach a bioinformatic value comprises an increase or decrease of likelihood or risk of the user having or developing the genetically-based condition.

Beecham teaches a method and apparatus for collecting sample from a test subject and taking the biometric data from the test subject (see: abstract). Beecham further teaches that genetic testing; for example, laboratory testing for genetic markers of disease and hereditary susceptibility to diseases or specific conditions is a rapidly developing area of medicine. Current methods include DNA and RNA analysis based on hybridization techniques such as fluorescence in situ hybridization, restriction length polymorphism and polymerase chain reaction for amplification of nucleic acid (see: column 5, lines 27-34). Furthermore, diseases and hereditary predispositions to disease for which genetic testing is currently available include sickle cell

anemia, muscular dystrophy of various types, fragile X disease, chronic myelogenous leukemia, predisposition to development of cancer such as breast cancer gene BRCA-1 or colon cancer gene. These issues have had considerable public attention focused on them because they may be used to discriminate against some people in specific settings, e.g., in the making of hiring and downsizing decisions, in permitting the individual to obtain health insurance and the likes (see: column 5, lines 35-44).

The obviousness for combining the teaching of Beecham with the system as taught by Hoffman et al. and O'Flaherty et al. are discussed in the rejection of claim 2, and incorporated herein.

As per claim 10, Hoffman et al. and O'Flaherty et al. teach a method and system for tokenless authorization of commercial transactions where a buyer registers with a computer system by submitting a PIN, at least one registration biometric sample and at least one financial account (see: Hoffman: column 4, lines 18-24). Hoffman et al. and O'Flaherty et al. further teach that each Data Processing Center (DPC) is made up of a number of computers and databases connected over a LAN or network (13, Fig. 1) (see: Hoffman: column 18, lines 51-52 and Fig. 2). In addition, Hoffman et al. and O'Flaherty et al. teach a terminal (2, Fig. 3) and the biometric input device (12, Fig. 3), which has biometric scanner (13, Fig. 3) (see: Hoffman: column 9, lines 27-29).

Hoffman et al. and O'Flaherty et al. fails to teach bioinformatic value used for transacting remotely with the user for enabling a medical service for the user.

Beecham teaches a method and apparatus for collecting sample from a test subject and taking the biometric data from the test subject (see: abstract). Beecham further teaches that

genetic testing, for example, laboratory testing for genetic markers of disease and hereditary susceptibility to diseases or specific conditions is a rapidly developing area of medicine (see: column 5, lines 27-34). Beecham also teaches that President Clinton indicated recently that a law would be proposed that makes it illegal for an insurance company to restrict coverage where a person has a genetic test result indicating possible future disease is likely (see: column 18, lines 30-45).

The obviousness for combining the teaching of Beecham with the system as taught by Hoffman et al. and O'Flaherty et al. are discussed in the rejection of claim 2, and incorporated herein.

As per claim 28, Hoffman et al. and O'Flaherty et al. teach a system and method for managing data privacy in a database management system that allows the storing of one or more characters ("A" or "D") or flags (represented by "Is" and "Os") which specify privacy preferences for the consumer's data records. These privacy preferences include "opt-outs" for (1) direct marketing, (2) disclosure of personal data along with information identifying the consumer, (3) anonymous disclosure of personal data, (4) disclosure of personal data for purposes of making automated decisions, and (5) disclosure or use of sensitive data (see: column 7, lines 10-35). The customer table (202, Fig. 3A) also comprises a global data control column (210, Fig. 3A). If a consumer permitted some data collection, analysis, or dissemination by selecting a "0" in the global data control column (210, Fig. 3A). The customers has indicated that his information can be disclosed to a third parties, both with his identity, and anonymously and also has allowed the data to be used to perform automated processing, and will permit the dissemination of sensitive data (see: O'Flaherty: column 7, lines 10-35 and Fig. 3A-3C).

Hoffman et al. and O'Flaherty et al. fail to teach transacting with the user a healthcare service according to the determined bioinformatic value.

Beecham teaches a method and apparatus for collecting sample from a test subject and taking the biometric data from the test subject (see: abstract). Beecham further teaches that genetic testing; for example, laboratory testing for genetic markers of disease and hereditary susceptibility to diseases or specific conditions is a rapidly developing area of medicine. Current methods include DNA and RNA analysis based on hybridization techniques such as fluorescence in situ hybridization, restriction length polymorphism and polymerase chain reaction for amplification of nucleic acid (see: column 5, lines 27-34). Furthermore, diseases and hereditary predispositions to disease for which genetic testing is currently available include sickle cell anemia, muscular dystrophy of various types, fragile X disease, chronic myelogenous leukemia, predisposition to development of cancer such as breast cancer gene BRCA-1 or colon cancer gene. These issues have had considerable public attention focused on them because they may be used to discriminate against some people in specific settings, e.g., in the making of hiring and downsizing decisions, in permitting the individual to obtain health insurance and the likes (see: column 5, lines 35-44). Moreover, some people fear that if genetic test results were made available or seized from a doctor, discrimination may occur against individuals with genetic predisposition to disease. Governmental and private concern for implications of a positive genetic test result, as for example for BRCA1, is well known. For further example, President Clinton indicated recently that a law would be proposed that makes it illegal for an insurance company to restrict coverage where a person has a genetic test result indicating possible future disease is likely (see: column 18, lines 30-45).

The obviousness for combining the teaching of Beecham with the system as taught by Hoffman et al. and O'Flaherty et al. are discussed in the rejection of claim 2, and incorporated herein.

5. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,366,682 to Hoffman et al. in view of U.S. Patent No. 6,275,824 to O'Flaherty et al. as applied to claim 1 above, and further in view of U.S. Patent No. 5,876,926 to Beecham and U.S. Patent No. 6,389,428 to Rigault et al.

As per claim 26, Hoffman et al., O'Flaherty et al. and Beecham teach a method and apparatus for collecting sample from a test subject and taking the biometric data from the test subject (see: Beecham: abstract). Hoffman et al., O'Flaherty et al. and Beecham teach further teaches that genetic testing, for example, laboratory testing for genetic markers of disease and hereditary susceptibility to diseases or specific conditions is a rapidly developing area of medicine. Current methods include DNA and RNA analysis based on hybridization techniques such as fluorescence in situ hybridization, restriction length polymorphism and polymerase chain reaction for amplification of nucleic acid (see: Beecham: column 5, lines 27-34).

Hoffman et al., O'Flaherty et al. and Beecham teach fail to teach a genetic nucleotide profile corresponding to a single nucleotide polymorphism (SNP) associated with the user.

Rigault et al. teaches a computer system that stores biomolecular data such as full length mRNA sequences, genomic sequences, synthetic sequences, peptide sequences, polypeptide sequences, peptide nucleic acid sequences, and genome mapping, pharmacogenomic, proteomic, single nucleotide polymorphism, genotyping and forensic data in a database (see: abstract and column 17, lines 10-66).

One of ordinary skill in the art at the time the invention was made would have found it obvious to include using single nucleotide polymorphism as taught by Rigault et al. with system as taught by Hoffman et al., O'Flaherty et al. and Beecham with the motivation of providing a way to store and associate mapping information with clones and clusters (see: Rigault et al.: column 17, lines 25-26).

(11) Response to Argument

In the Appeal Brief filed 19 June 2003, Appellant makes the following arguments:

(A) The Examiner fails to establish a *prima facie* case of obviousness, with regards to a prior art reference teaching or suggesting all the claim limitations.

(B) There is no suggestion or motivation to combine the prior references.

(C) Prior art reference teaches away from the invention.

Examiner will address Appellant's arguments in sequence as they appear in the brief.

Response to Arguments (A) and (B):

In response to the first and second arguments, the Examiner respectfully submits that obviousness is determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. See *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); *In re Hedges*, 783 F.2d 1038, 1039, 228 USPQ 685,686 (Fed. Cir. 1992); *In re Piasecki*, 745 F.2d 1468, 1472, 223 USPQ 785,788 (Fed. Cir. 1984); and *In re Rinehart*, 531 F.2d 1048, 1052, 189 USPQ 143,147 (CCPA 1976). Using this standard, the Examiner respectfully submits that he has at least satisfied the burden of presenting a *prima facie* case of obviousness, since he has presented evidence of corresponding claim elements in the prior art and has expressly

articulated the combinations and the motivations for combinations that fairly suggest Appellant's claimed invention (see paper number 13).

As such, the Examiner recognizes that references cannot be arbitrarily altered or modified and that there must be some reason why one skilled in the art would be motivated to make the proposed modifications. However, although the Examiner agrees that the motivation or suggestion to make modifications must be articulated, it is respectfully contended that there is no requirement that the motivation to make modifications must be expressly articulated within the references themselves. References are evaluated by what they suggest to one versed in the art, rather than by their specific disclosures, *In re Bozek*, 163 USPQ 545 (CCPA 1969).

The Examiner is concerned that Applicant apparently ignores the mandate of the numerous court decisions supporting the position given above. The issue of obviousness is not determined by what the references expressly state but by what they would reasonably suggest to one of ordinary skill in the art, as supported by decisions in *In re DeLisle* 406 Fed 1326, 160 USPQ 806; *In re Kell, Terry and Davies* 208 USPQ 871; and *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ 2d 1596, 1598 (Fed. Cir. 1988) (citing *In re Lalu*, 747 F.2d 703, 705, 223 USPQ 1257, 1258 (Fed. Cir. 1988)). Further, it was determined in *In re Lamberti et al*, 192 USPQ 278 (CCPA) that:

(i) obviousness does not require absolute predictability;
(ii) non-preferred embodiments of prior art must also be considered; and
(iii) the question is not express teaching of references, but what they would suggest.

In particular, Appellant clearly fails to properly consider the biometric sample that include a biometric input device that include a fingerprint scanner, voice input device (microphone), palm print scanner, retinal scanner or the like (see: column 9, lines 27-34 and

column 4, lines 18-24). Furthermore, it well known in the art that biometric sample include "personal genetic nucleotide profile" such as DNA or DNA coding sequence. For example, U.S. Patent No. 5,956,409 to Chan et al. (filed 4/26/ 96) discusses biometric data comprising all or a selected part of, or an encoding of, a set of biometric information including a human genome or related genetic information (see: column 3, lines 49-61). In addition, U.S. Patent No. 6,084,967 to Kennedy et al. (filed 10/27/97) teach a biometric verification system that include a biometric data such as DNA (see: column 2, line 65 to column 3, line 6) and U.S. Patent No. 5,917,913 to Wang (filed 12/4/96) teach that biometrics or unique identifying data includes DNA coding sequence (see: column 5, line 65 to column 6, line 6). Therefore, the skilled artisan taking into account the above-mentioned information would have considered biometric samples to include "personal genetic nucleotide profile" such as DNA or DNA coding sequence. Moreover, it is respectfully submitted that Appellant's position is clearly improper based on the aforementioned case law.

Further, according to *In re Jacoby*, 135 USPQ 317 (CCPA 1962), the skilled artisan is presumed to know something more about the art than only what is disclosed in the applied references. In *In re Bode*, 193 USPQ 12 (CCPA 1977), every reference relies to some extent on knowledge of persons skilled in the art to complement that which is disclosed therein.

According to *Ex parte Berins*, 168 USPQ 374 (Bd. Appeals), there is no statutory limitation as to the number of references that may be used to demonstrate obviousness...not what references expressly state but what they would reasonably suggest to one of ordinary skill in the art. In *In re Conrad*, 169 USPQ 170 (CCPA), obviousness is not based on express suggestion, but what references taken collectively would suggest.

As such, it is respectfully submitted that an explanation based on logic and sound scientific reasoning of one ordinarily skilled in the art at the time of the invention that support a holding of obviousness has been adequately provided by the motivations and reasons indicated by the Examiner both in the prior Office Action, *Ex parte Levengood*, 28 USPQ2d 1300 (Bd. Pat. App. & Inter., 4/22/93).

As such, it is respectfully submitted that Appellant appears to view the applied references, separately and in a vacuum, without considering the knowledge of average skill in the art, and further fails to appreciate the breadth of the claim language that is presently recited. Moreover, the issue at hand is not whether the applied references specifically teaches each and every feature recited by Appellant, *per se*, but rather, whether or not the prior art, when taken in combination with the knowledge of average skill in the art, would put the artisan in possession of the features as claimed. With regard to this issue, the courts have held that even if a patent does not specifically disclose a particular element, said element being within the knowledge of a skilled artisan, the patent taken in combination with that knowledge, would put the artisan in possession of the claimed invention. *In re Graves*, 36 USPQ 2d 1697 (Fed. Cir. 1995).

Response to Arguments (C):

In response to the third arguments, the Examiner respectfully submits that Beechman teach a method and apparatus for collecting sample from a test subject and taking the biometric data from the test subject (see: abstract). Beecham further teaches that genetic testing; for example, laboratory testing for genetic markers of disease and hereditary susceptibility to diseases or specific conditions is a rapidly developing area of medicine. Current methods include DNA and RNA analysis based on hybridization techniques such as fluorescence in situ

hybridization, restriction length polymorphism and polymerase chain reaction for amplification of nucleic acid (see: column 5, lines 27-34). Furthermore, diseases and hereditary predispositions to disease for which genetic testing is currently available include sickle cell anemia, muscular dystrophy of various types, fragile X disease, chronic myelogenous leukemia, predisposition to development of cancer such as breast cancer gene BRCA-1 or colon cancer gene. These issues have had considerable public attention focused on them because they may be used to discriminate against some people in specific settings, e.g., in the making of hiring and downsizing decisions, in permitting the individual to obtain health insurance and the likes (see: column 5, lines 35-44). Moreover, some people fear that if genetic test results were made available or seized from a doctor, discrimination may occur against individuals with genetic predisposition to disease. Governmental and private concern for implications of a positive genetic test result, as for example for BRCA1, is well known. For further example, President Clinton indicated recently that a law would be proposed that makes it illegal for an insurance company to restrict coverage where a person has a genetic test result indicating possible future disease is likely (see: column 18, lines 30-45).

In addition, with respect to Appellant's argument that Beechman teaches away from the invention, the Examiner respectfully disagrees. In particular, Appellant's remarks appear to be based on the premise that Beechman's teaches a data system for processing genetic test data anonymously. Appellant then concludes that "The need for individual... pertinent provides a biometric identification" as, indicated in page 16 of the Appeal Brief (Paper Number 19) teaches away from the invention. This position is incorrect for the following reasons. The combination purported by the Examiner does not discourage individuals from revealing or permitting access

to genetic data, as the Examiner never relied upon Beechman for this limitation. Beechman was relied on for teaching a method and apparatus for collecting sample from a test subject and taking the biometric data from the test subject (see: abstract). Beechman further teaches that genetic testing; for example, laboratory testing for genetic markers of disease and hereditary susceptibility to diseases or specific conditions (see: column 5, lines 27-34). The only modification proposed by the Examiner was that of incorporating privacy preference including "opts-outs" disclosed by O'Flaherty et al. (col. 7, lines 10-35 and 3A-3C) with the intention of permitting a user to voluntarily-select a portion of his or her personal data to be access by another party.

Additionally, the Examiner respectfully submits that the O'Flaherty et al. reference, and not Beechman, *per se*, that was relied upon for the specific teaching of privacy preferences including "opt-outs" for (1) direct marketing, (2) disclosure of personal data along with information identifying the consumer, (3) anonymous disclosure of personal data, (4) disclosure of personal data for purposes of making automated decisions, and (5) disclosure or use of sensitive data (see: column 7, lines 10-35). Beechman was relied on for primarily teaching a method and apparatus for collecting sample from a test subject and taking the biometric data from the test subject (see: abstract). Thus, the proper combination of the applied references would be the incorporation of Beechman's testing of biometric data for genetic markers of disease and hereditary susceptibility to diseases or specific conditions with the system of Hoffman et al. and O'Flaherty et al.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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